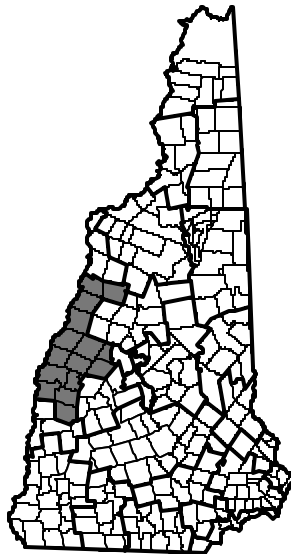


# Lebanon Healthcare Service Area Regional Health Profile



This narrative is part of a larger effort, the *New Hampshire Regional Health Profiles*, and grew out of a mandate established by the Legislature in its passage of SB 183 in 1999. That bill amended RSA 126A to include a requirement for the Department of Health and Human Services to continually assess the health status of the State's residents and to make its findings available in a report issued every two years.

This narrative was jointly developed by the Dartmouth Hitchcock Alliance and the Department and is the first to be issued under this legislation. The *Regional Profiles* provide a means for residents, community leaders, planners and providers to gain a better understanding of the health status of the State's residents and communities.

The *Regional Profiles* provides information that can be used to establish local *Healthy New Hampshire 2010* targets and to meet the needs assessment expectations of the State's Community Benefits legislation

## Overview of the HSA

The Lebanon Healthcare Service Area (HSA) is served by Dartmouth-Hitchcock Medical Center and Alice Peck Day Hospital. This profile describes the health of the people living in the New Hampshire towns. Together, these fifteen towns had an estimated population of 47,479 in 1998 and cover a region of 637 square miles in New Hampshire, resulting in a population density of 75 people per square mile. As is the case with the State's other college towns, 18-24 year olds are more prevalent here than throughout New Hampshire in general. There are also slightly more elderly. The chart in the Demographic Profile presents a comparison of the State and HSA population profiles.

Town Name	1998 Pop Est	% of HSA Pop	% of HSA Self Pay Admissions	Ratio of Self-Pay Admissions to Pop Pct	1996 Per Capita Income	Pop Density (persons per sq. mi.)	Miles to Nearest Hospital*
Canaan	3,292	7%	5%	0.8	\$16,283	62	19
Cornish	1,676	4%	2%	0.6	\$17,818	40	10
Croydon	684	1%	8%	5.3	\$22,507	19	20
Enfield	4,222	9%	14%	1.5	\$18,388	105	11
Grafton	971	2%	4%	1.8	\$13,419	23	21
Grantham	1,404	3%	2%	0.8	\$23,233	52	10
Hanover	9,636	20%	4%	0.2	\$22,850	196	5
Lebanon City	12,768	27%	26%	1.0	\$17,858	317	-
Lyme	1,544	3%	2%	0.5	\$29,372	29	11
Newport	6,304	13%	24%	1.8	\$14,167	145	10
Orange	257	1%	0%	0.5	\$17,646	11	22
Orford	1,039	2%	3%	1.3	\$14,040	22	18
Piermont	651	1%	1%	0.9	\$17,690	17	15
Plainfield	2,198	5%	2%	0.5	\$20,055	42	14
Warren	833	2%	2%	1.4	\$15,069	17	25
<b>HSA Total</b>	<b>47,479</b>				<b>\$18,793</b>	<b>75</b>	
New Hampshire	1,185,000				\$18,697	132	

\* = Nearest Hospital may be in a different HSA

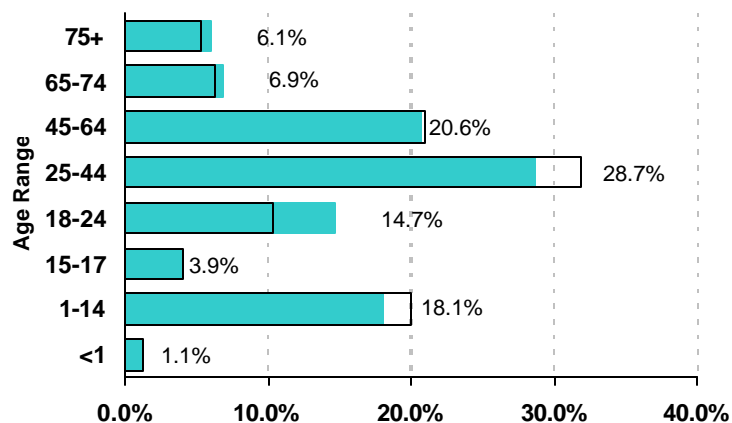
- 1998 Population Estimate = New Hampshire Office of State Planning.
- Percent of HSA Self Pay Admissions = Each community's share of individual overnight hospital admissions for the full HSA that are recorded as "Self Pay" on the Uniform Hospital Discharge Data Set for 1998.
- Ratio of Self-Pay Admissions to Population Percentage = Percent of HSA self-pay admissions divided by the percent of HSA population. A higher ratio reflects a greater proportion of individuals within a community who must cover the costs of hospitalization from their personal resources, i.e., they do not have health insurance coverage for the hospitalization.
- 1996 Per Capita Income = Office of State Planning, from the Department of Revenue Administration.
- Population Density = Total square miles from the Office of State Planning, divided by the 1998 Population Estimate.
- Miles to Nearest Hospital = mileage from a community to the nearest hospital that may not be the hospital(s) in the HSA, as given in the *1999 New Hampshire Community Profiles*, published by the State Occupational Information Coordinating Committee (SOICC) of New Hampshire.

## Demographic Profile

### Percentage of Population by Age

Shaded and Labeled bars = HSA population profile

Outlined bar = State population profile



Graphics are based on data provided in the Primary Care Data Set, 1993-1997, which stated “State, city, and town population counts for New Hampshire have been obtained by applying the proportions from the 1995 New Hampshire Population Projections for Counties by Age and Sex to the 1995 Population Estimates of New Hampshire Cities and Towns; both of which were prepared by the New Hampshire Office of State Planning (OSP). The population figures for 1995 were chosen for use in calculating rates since this year represents the midpoint of the five years of study, 1993 through 1997... Since the town-specific age and sex population estimates are based on town-wide estimates applied to county level projections, it is assumed that there is an unknown amount of error in the individual components of the estimates. However, when combining towns together to construct HSAs, much of the variability in the town-specific estimates is assumed to be canceled.” ***Primary Care Access Data, 1993-1997***

Limited data on population and households from the national 2000 census is provided in the Census 2000 section of the ***Regional Profiles***. That data will be updated at the ***Regional Profiles*** website as it becomes available and should be used when reviewing the “Additional Indicators” section below.

## Health Profile

The points offered below are provided as an overview of the health of the HSA in the three **Regional Profile** focus areas: *Current Health*, *Use of Health Care* and *Risks to Future Health*. These are provided as a representative sample of findings presented in the data tables and should not be construed as the most important findings. Readers are urged to review the data tables to better understand the conditions and circumstances of this HSA.

In some instances, the differences between the HSA and the State are described as significant. This refers to a difference being “statistically significant.”

- When the source of the data is the 1999 NH Health Insurance Coverage and Access Survey (NH HICAS), the difference is significant at the 95% confidence level, i.e., when the range between the upper and lower confidence intervals for the HSA is higher or lower than the range for the State confidence interval (the confidence ranges do not overlap).
- When the source of data is the Primary Care Access Data set (PCAD), a difference is also significant at the 95% confidence level, based on a “z test score,” a test for statistical significance, i.e., when this test statistic is “significant,” there is 95% confidence that the rates being compared are different for reasons other than “random chance.”
- Because a finding is statistically significant, i.e., not due to chance alone, the difference may not be of sufficient magnitude to be practical or meaningful to understanding the health issue or for developing strategies.
- A finding that a difference is not statistically significant may not mean that there is no value to paying attention to the difference, i.e., not being statistically significant does not mean that it is not important or necessary to consider the underlying health issues for indicators that are different between the HSA and the State, particularly on indicators that seem to show a trend or relationship, such as between indicators associated with births.

All rates in this narrative have been age-adjusted. The calculation of age-adjusted rates makes it possible to compare the rates between an HSA and the State. The proportion of the population in each age range varies from HSA to HSA and between an HSA and the State. Thus, it would be misleading to compare HSA rates to the State rate unless the rates were adjusted for this variation in the distribution of age ranges.

Please refer the *Technical Notes* section for an explanation of the age-adjustment calculation and the calculations for statistical significance and confidence intervals.

Unless noted in the text, the data date and source are given in [ ] at the end of each point. Key to abbreviations:

- NHES = New Hampshire Employment Security.
- NH HICAS = *New Hampshire Health Insurance Coverage and Access Survey, 1999*; Office of Planning and Research, Department of Health and Human Services.
- PCAD = *Assessing New Hampshire's Communities: Primary Care Access Data, 1993-1997*; Health Statistics and Data Management Bureau, Office of Community and Public Health.
- UHDDS = Uniform Hospital Discharge Data Set, maintained by the Health Statistics and Data Management Bureau, Office of Community and Public Health.
- US Census = Taken from 1990 Census of Population and Housing Summary Tape File 3A (STF3A), 1990 US Census data, US Department of Commerce.

## Observations on Current Health

- According to the 1999 NH Health Insurance Coverage and Access Survey 92.7% of the population under 65 in this HSA characterized their health status as “good,” “very good,” or “excellent”. The State average was 94.8%.
- According to the findings of the 1999 NH Health Insurance Coverage and Access Survey 5.5% of the population under age 65 in this HSA had a chronic disease lasting at least one year. This average was comparable to the State average of 5.9%.
- 2.3% of the population between the ages of 16 and 64 in this HSA had a disability and were not in the work force. This average is lower than the State average of 2.9%. [1990; US Census]
- The rate of “premature deaths” (deaths in the 18 – 64 age group) in this HSA was 2.1 per 1000 population. The State rate was 2.6 per 1000 population. [1993-1997; PCAD]
- The rate of low weight births in this HSA is comparable to the State rate: 53 per 1000 live births vs. 52 per 1000 live births. [1993-1997; PCAD]

## Observations on Use of Health Care

- 16.9% of the under age 65 population in this HSA were not “extremely” or “very” confident in their ability to access care. This was lower though not significantly different than the State average of 19%. [1999; NH HICAS]
- According to the findings from the 1999 NH Health Insurance Coverage and Access Survey 5.9% of the population under age 65 in this HSA did not have a usual source of medical care compared to the State average of 6.9%.
- 10.7% of the population under age 65 in this HSA did not have a physician visit in the year prior to the 1999 NH Health Insurance Coverage and Access Survey. This was slightly better than the State average of 11.7% though the difference was not statistically significant.
- 20.5% of the population under age 65 did not have a dental visit in the year prior to the 1999 NH Health Insurance and Coverage and Access Survey. This was slightly better though not significantly different than the State average of 21.9%.

**Ambulatory Care Sensitive Conditions** = medical conditions that may not require inpatient hospitalization (a stay of at least one night) if timely and appropriate primary care is received.

- The hospital admission rate for rapid onset ambulatory care sensitive conditions, such as pneumonia and other infections, was significantly less for this HSA compared to the State rate (6.6 per 1000 population vs. 7.3 per 1000 population). [1993-1998; UHDDS]
- The hospital admission rate for ambulatory care sensitive chronic conditions, such as asthma and diabetes, was less for this HSA compared to the State (4.0 per 1000 population vs. 4.6 per 1000 population). [1993-1998; UHDDS]

- The HSA rate of hospital admissions (per 1000 population) for ambulatory care sensitive conditions were comparable to the State rates for three age categories. [1993-1997; PCAD]

	<b>HSA</b>	<b>State</b>	<b>Ratio (HSA/State)</b>
Pediatric	4.6	4.3	1.1
Adult	6.9	6.1	1.1
Elder	60.7	57.4	1.1

(Pediatric = up to age 18; Adult = 18-64; Elder = 65+)

- Adult and pediatric residents of the HSA experienced significantly higher rates of hospital admissions for injuries compared to the State rates. [1993-1997; PCAD]

	<b>HSA</b>	<b>State</b>	<b>Ratio (HSA/State)</b>
Pediatric*	5.0	3.1	1.6
Adult*	7.6	6.2	1.2
Elder	27.1	26.2	1.0

(Pediatric = up to age 18; Adult = 18-64; Elder = 65+)

\* = Significantly higher

- 29% of hospital bills of residents of this HSA were paid by Medicare, 22% by commercial insurers, 20% by HMOs, 20% by other insurers, 6% by Medicaid, and 4% by the patients. [1998; UHDDS]

## Observations on Risks to Future Health

- The 1999 rate of unemployment in this HSA was 1.5%. This was lower than the State average of 2.7%. [NHES]
- 21.3% of the families in this HSA earned incomes of less than 200% of the federal poverty level. This was the same as the State average of 21.4%. [1999; NH HICAS]
- 8.3% of children under age 19 in this HSA received Medicaid and/or Food Stamp benefits. This proportion was significantly lower than the State average of 9.1%. [1993-1997; PCAD]
- 1.8% of the adults in this HSA received Medicaid and/or Food Stamp benefits. This proportion was significantly lower than the State average of 2.1%. [1993-1997; PCAD]
- 92.9% of the population under age 65 in this HSA completed High School, a proportion comparable to the State average of 92.2%. [1999; NH HICAS]
- Selected birth characteristics for this HSA:
  - ✓ The rate of maternal smoking during pregnancy was significantly lower than the State rate (142 per 1000 live births vs. 176 per 1000 live births). [1993-1997; PCAD]
  - ✓ The rate of late or no prenatal care (14 per 1000 live births) was lower than the State rate (17 per 1000 live births). [1993-1997; PCAD]
  - ✓ The rate of births to teen mothers (less than age 18) was 14.8 per 1000 live births. This was comparable to the State rate of 14.4 per 1000 live births. [1993-1997; PCAD]

- ✓ The rate of births to unmarried mothers was 219 per 1000 live births. This was comparable to the State rate of 223 per 1000 live births. [1993-1997; PCAD]
- ✓ The rate of births to mothers who had not completed High School was significantly lower in this HSA compared to the State (93 per 1000 live births vs. 109 per 1000 live births). [1993-1997; PCAD]
- ✓ The rate of births covered by Medicaid was 212 per 1000 live births. This was comparable to the State rate of 207 per 1000 live births. [1993-1997; PCAD]
- 8.9% of the population under 65 in this HSA was without insurance during some portion of the 12 months prior to the 1999 NH Health Insurance Coverage and Access Survey. This proportion was lower than the State average of 11.4%.
- According to the 1999 NH Health Insurance Coverage and Access Survey 7.7% of the population under age 65 in this HSA did not have health insurance. The State average was 9.3%.
- According to the 1999 NH Health Insurance Coverage and Access Survey 27.8% of the population under age 65 did not have dental coverage. The State average was 25.7%.

## Additional Observations

By reviewing census data, it is possible to learn much about the people living in a community. Unfortunately, the most recent census available is from the 1990 US Census. It will be helpful to compare data from the 2000 census (which is underway) to that from 1990 to see how this HSA has changed in terms of:

- Households with children headed by single parents – In 1990 17.1% of the households in the HSA were headed by a single parent (female headed: 11.9%; male headed: 5.2%). The State average was 17% of households headed by a single parent (13.1% were female headed and 3.9% were male headed). [1990; US Census]
- Income distribution – In 1990 16.2% of the families in the HSA had incomes below \$20,000 and 35.8% of the families in the HSA had incomes greater than \$50,000. The State average was 15.2% of families with income below \$20,000 and 37% of families with incomes greater than \$50,000. [1990; US Census]
- People isolated by virtue of:
  - ✓ Living alone – In this HSA 24.1% of the households were classified as “single person” compared to the State average of 21.9%. [1990; US Census]
  - ✓ Not speaking English – In this HSA 0.7% of the households were linguistically isolated compared to the State average of 1.5%. [1990; US Census]
  - ✓ Not owning a vehicle – In this HSA, 18% of the population did not have personal transportation compared to a State average of 16.1%. [1990; US Census]

- Population stability, as reflected in:
  - ✓ Not relocated over the last 5 years – In this HSA 47.9% of the households lived in the same location at least 5 years compared to the State average of 47.8%. [1990; US Census]
  - ✓ Owned a home rather than rented – In this HSA 73.1% of the population lived in owner-occupied housing compared to the State average of 73.6%. [1990; US Census]